



1-800-QUIT-NOW  
1-800-784-6469

# COVERAGE FOR TOBACCO USE CESSATION TREATMENTS

## Why Is Health Insurance Coverage for Tobacco Use Treatments so Important?

Tobacco use is costly to employers both in terms of smoking-related medical expenses and lost productivity. These costs add up:

- **\$75 billion** – the amount of annual healthcare costs in the U.S. attributable directly to smoking.<sup>1</sup>
- **\$2.46 billion** - the total healthcare cost in N.C. attributable to smoking.<sup>2</sup>
- **\$3.3 billion** - total losses in productivity in N.C. attributable to smoking.<sup>2</sup>
- **\$1,850 per year** – increased medical cost to employers, per smoking employee.<sup>3</sup>
- **\$3,747 per year** - cost to employers, per smoking employee, for medical costs plus lost productivity.<sup>3</sup>
- **\$15,800** - more in lifetime medical expenses incurred by men who smoke (2002 dollars).<sup>4</sup>
- **\$17,500** - more in lifetime medical expenses incurred by women who smoke (2002 dollars).<sup>4</sup>
- **4 more work days** missed by men who smoke and **2 more** missed by women who smoke (compared to nonsmoking men and women).<sup>5</sup>
- **Heart disease, stroke, multiple cancers, respiratory diseases**, and other costly illnesses are caused by smoking. These illnesses also increase absenteeism and reduce productivity.
- **Lung disease and lung cancer** are caused by secondhand smoke.<sup>6,7</sup>
- **Costly complications of pregnancy**, such as pre-term delivery and low birth-weight infants, are increased by smoking.<sup>8</sup> A single preterm delivery can cost hundreds of thousands of dollars in health insurance costs for treatment.

### How Tobacco Cessation Cuts Cost

Over time, tobacco-use cessation benefits generate financial returns for employers in four ways:

- Reduced health care costs<sup>5,28</sup>
- Reduced absenteeism<sup>5,29,30</sup>
- Increased on-the-job productivity<sup>5,29,30</sup>
- Reduced life insurance costs<sup>5,29</sup>

Benefits realized more immediately include:

- Increases in employee productivity<sup>5,30</sup>
- Reductions in smoking-attributed neonatal health care costs<sup>26</sup>

Employers who provide a smoke-free workplace may also realize savings on fire insurance and costs related to items such as ventilation services and property repair and upkeep.<sup>5,29</sup>

**Smoking is the leading preventable cause of death in the United States.**<sup>9,10</sup> Smokers who quit will, on average, live longer and have fewer years living with disability.<sup>11</sup>

About 19.8% of U.S. adults<sup>12</sup> and 20% of high school students smoke.<sup>13</sup> Only 5 -7% are successful in quitting without help. **Tobacco use treatment doubles quitting success rates.**<sup>10</sup>



*Paying for tobacco use cessation treatments is the single most cost-effective health insurance benefit for adults that can be provided to employees.<sup>14,15,16</sup>*

## What treatments are available? How effective are they?

Tobacco use cessation treatments are safe and effective. These include counseling and medications, or a combination of both.<sup>10</sup>

- Face-to-face counseling and interactive telephone counseling are more effective than purely educational or self-help materials.<sup>10,17</sup>
- The effectiveness of counseling services increases as their intensity (the number and length of sessions) increases.<sup>10</sup>
- Smokers are more likely to use telephone counseling than to participate in individual or group counseling sessions.<sup>17,18</sup>

The Food and Drug Administration has approved seven first-line medications to help smokers quit:

- Five are nicotine replacement therapies that relieve withdrawal symptoms. They include nicotine gum, patches, nasal spray, inhalers and lozenges.<sup>10</sup>
- Two non-nicotine medications are thought to reduce the urge to smoke by affecting the same chemical messengers in the brain that are affected by nicotine. They are bupropion (Zyban, Wellbutrin) and varenicline (Chantix).<sup>10</sup>

## Prescription and Over-the-Counter Tobacco Cessation Medications\*

<i>Type</i>	<i>Form</i>	<i>Common Brand Name(s)</i>	<i>Availability</i>
Nicotine Replacement Therapy	Gum	Nicorette®	Over-the-counter (OTC)
	Patch	Nicoderm®, Habitrol®, Prostep®, Nicotrol®	OTC and prescription
	Lozenge	Commit®	OTC
	Inhaler	Nicotrol®	Prescription
	Nasal Spray	Nicotrol®	Prescription
Bupropion SR	Pill	Zyban®, Wellbutrin®	Prescription
Varenicline	Pill	Chantix®	Prescription

*\*Approved by the Food and Drug Administration (FDA) and addressed in the 2008 PHIS Guidelines.*

*Scientifically proven treatments can double chances of quitting smoking.<sup>10</sup>*

## How Should Benefits Be Designed?

Benefits that include proven tobacco-use cessation treatments increase treatment use and the number of successful quitters; therefore, both the Public Health Service-sponsored Clinical Practice Guideline, *Treating Tobacco Use and Dependence*, and the Community Preventive Services Task Force recommend that all insurers provide tobacco cessation benefits that do the following:

- Pay for counseling and medications, together or separately.<sup>10</sup>
- Cover at least four counseling sessions of at least 30 minutes each, including proactive telephone counseling and individual counseling. While classes are also effective, few smokers attend them.<sup>19</sup>
- Cover both prescription and over-the-counter nicotine replacement medications, bupropion, and varenicline (see medication table).<sup>10</sup>
- Provide counseling and medication coverage for at least two smoking cessation attempts per year.<sup>20, 21</sup>
- Eliminate or minimize co-pays or deductibles for counseling and medications, as even small co-payments reduce the use of proven treatments.<sup>22, 19</sup>

## What is the Role of Health Insurance Coverage in Tobacco-Use Cessation?

Health insurance coverage of medication and counseling increases the use of effective treatments.<sup>18</sup>

Although 66% of Americans under the age of 65 are insured through an employer,<sup>23</sup> only 24% of employers offer any coverage for tobacco-use treatment and less than 5% provide coverage for both medication and counseling.<sup>24</sup>

*Coverage of tobacco-use cessation treatment increases both use of effective treatment and the number of successful quit attempts.<sup>22</sup>*

## How Much Do Cessation Benefits Cost? Are They Cost-Effective?

Tobacco cessation is more cost-effective than other common and covered disease prevention interventions, such as the treatment of hypertension and high blood cholesterol.<sup>15</sup>

Cost analyses have shown tobacco cessation benefits to be either cost-saving or cost-neutral.<sup>5, 20</sup> Overall, cost/expenditure to employers equalizes at three years; benefits exceed costs by year five.<sup>5</sup>

Costs for comprehensive tobacco cessation benefits are between 10 and 40 cents per member per month (costs vary based on utilization and dependent coverage).<sup>19, 25</sup>

In contrast, the annual cost to the employer of tobacco use is about **\$3,747 per year** in medical costs, plus lost productivity.<sup>3</sup>

Neonatal health care costs related to smoking are equivalent to an additional \$704 for each maternal smoker. Research studies indicate that a smoking cessation program for pregnant women can save as much as \$6 for each \$1 spent.<sup>26</sup>

## What Is the Experience of Companies and Health Plans Providing This Benefit?

Businesses that have included a tobacco cessation benefit report that this coverage has increased the number of smokers willing to undergo treatment and has increased the percentage that successfully quit.<sup>25,27</sup>

- Quintiles, in Research Triangle Park, N.C., has helped scores of its employees quit smoking with a combination of a tobacco-free policy and coverage of medications and quit-smoking counseling.<sup>31</sup>
- The New Hanover Regional Medical Center in Wilmington, N.C., recruited 550 employees into quitting programs during the weeks leading up to their tobacco-free policy going into effect by providing free classes and discounts on medications.<sup>32</sup>
- Union Pacific Railroad has experienced a drop in smoking rates among its employees from 40% to 25% during the seven-year period that it offered a cessation benefit as part of a comprehensive cessation program.<sup>26</sup>

## How Do I Get More Information?

Listed below are websites where you can find additional information on tobacco-use cessation or reimbursement for cessation treatment.

### *Designing Health Insurance Benefits*

**Build a Financial Infrastructure: Health Plan Benefits and Provider Reimbursement** combines evidence-based recommendations with the experiences of the Pacific Center on Health and Tobacco (PCHT), a consortium of five western states (California, Oregon, Washington, Arizona, and Hawaii), concerning tobacco cessation benefits and provider reimbursement. The report is designed to guide planning and decision-making by states and other groups that are working to implement tobacco cessation programs. Also available are two summaries based on this report: 1) *Health Insurance Benefits for Treatment of Tobacco Dependence* and 2) *Invest in Tobacco Cessation for a Healthy, Productive Workplace*. Visit the PCHT website at [www.tcln.org/cessation/employers.html](http://www.tcln.org/cessation/employers.html).

**Employers' Smoking Cessation Guide: Practical Approaches to a Costly Workplace Problem**, a guide published by the Professional Assisted Cessation Therapy (PACT) consortium for large and small employers interested in enacting an affordable, effective smoking cessation program, is available at [www.tcln.org/cessation/employers.html](http://www.tcln.org/cessation/employers.html).

**A Preventive Benefits Profile** was developed for employers in North Carolina by N.C. Prevention Partners. The guide can be found at [www.ncpreventionpartners.org](http://www.ncpreventionpartners.org).

### *Cost Calculators*

- American Cancer Society ROI Calculator for Tobacco:  
[www.acsworkplacesolutions.com/tobaccocalculator.asp](http://www.acsworkplacesolutions.com/tobaccocalculator.asp)
- America's Health Insurance Plans (AHIP) and Center for Health Research, Kaiser Permanente Tobacco ROI Calculator: [www.businesscaseroi.org/roi/default.aspx](http://www.businesscaseroi.org/roi/default.aspx)



## Resources Useful for Employers

**N.C. Tobacco Use Quitline** at 1-800-QUIT-NOW (1-800-784-8669) provides expert quit coaching in multiple languages for all North Carolina tobacco users from 8:00 a.m. until 3:00 a.m. seven days a week.

**The Tobacco Prevention and Control Branch** web site provides secondhand smoke policy and tobacco cessation information, including downloadable brochures, flyers, posters, etc.:

[www.tobaccopreventionandcontrol.ncdhhs.gov/cessation/quitline.htm](http://www.tobaccopreventionandcontrol.ncdhhs.gov/cessation/quitline.htm) .

**Making your Workplace Smokefree: A Decisionmaker's Guide** provides information on the costs of tobacco use to employers. The entire guide or selected chapters are available in PDF format at

[www.cdc.gov/tobacco/secondhand\\_smoke/guides/workplace\\_guide.htm](http://www.cdc.gov/tobacco/secondhand_smoke/guides/workplace_guide.htm) .

**Save Lives Save Money: Make Your Business Smoke-Free** provides information on exposure to secondhand smoke in the workplace and the benefits to employers once a smoke-free workplace has been implemented.

[www.cdc.gov/tobacco/secondhand\\_smoke/guides/business\\_guide.htm](http://www.cdc.gov/tobacco/secondhand_smoke/guides/business_guide.htm) .

## Sources

- 1 National Institute on Drug Abuse Research Report Series, *What is the Extent and Impact of Tobacco Use?*, July 2006.
- 2 Campaign for Tobacco-Free Kids, "The Toll of Tobacco in North Carolina" Fact Sheet accessed May 19, 2008 at <http://www.tobaccofreekids.org/reports/settlements/toll.php?StateID=N.C.>
- 3 Centers for Disease Control and Prevention. Annual smoking-attributable mortality, years of potential life lost, and economic costs—United States, 1995–1999. *Morbidity and Mortality Weekly Report* 2005; 54(25): 625–628.
- 4 Hodgson T. Cigarette smoking and lifetime medical expenditures. *The Milbank Quarterly* 1992; 70(1):81–125.
- 5 Warner KE, Smith RJ, Smith DG, Fries BE. Health and economic implications of a work-site smoking-cessation program: a simulation analysis. *Journal of Occupational and Environmental Medicine* 1996; 38(10):981–92.
- 6 U.S. Department of Health and Human Services. *Reducing the Health Consequences of Smoking: 25 Years of Progress: A Report of the Surgeon General: 1989 Executive Summary*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1989.
- 7 National Cancer Institute. *Health Effects of Exposure to Environmental Tobacco Smoke. The Report of the California Environmental Protection Agency*. Smoking and Tobacco Control Monograph 10. U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Pub. No. 99–4645, 1999.
- 8 U.S. Department of Health and Human Services. *Women and Smoking: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2001.
- 9 McGinnis JM, Foege WH. Actual causes of death in the United States. *Journal of the American Medical Association* 1993;270:2207–12.
- 10 Fiore MC, Bailey WC, Cohen SJ, et al. *Treating Tobacco Use and Dependence: Clinical Practice Guideline*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; 2008.
- 11 Nusselder WJ, Looman CW, Marang-van de Mheen PJ, et al. Smoking and the compression of morbidity. *Journal of Epidemiology and Community Health* 2000;54(8):566–74.
- 12 Centers for Disease Control and Prevention, "Cigarette Smoking Among Adults – United States, 2007" *MMWR* 57 (45): 1221–1226
- 13 *Centers for Disease Control and Prevention, "Cigarette Smoking Among High School Students – United States, 1991–2007" MMWR* 57(25); 689–691.
- 14 Warner KE. Cost effectiveness of smoking-cessation therapies. Interpretation of the evidence and implications for coverage. *Pharmacoeconomics* 1997; 11(6):538–49.
- 15 Cummings SR, Rubin SM, Oster G. The cost-effectiveness of counseling smokers to quit. *Journal of the American Medical Association* 1989; 261(1):75–79.

- 16 Coffield AB, Maciosek MV, McGinnis JM, et al.. Priorities among recommended clinical preventive services. *American Journal of Preventive Medicine* 2001; 21(1):1–9.
- 17 McAfee T, Sofian N, Wilson J, Hindmarsh M. The role of tobacco intervention in population-based health care. *American Journal of Preventive Medicine* 1998; 14:46–52.
- 18 McAfee T. Increasing the population impact of quitlines. Paper presented at the North American Quitline Conference, Phoenix, AZ, 2002.
- 19 Schauffler HH, McMenamin S, Olsen K, Boyce-Smith G, Rideout JA, Kamil J. Variations in treatment benefits influence smoking cessation: results of a randomized controlled trial. *Tobacco Control* 2001;10:175–80.
- 20 Harris JR, Schauffler HH, Milstein A, Powers P, Hopkins DP. Expanding health insurance coverage for smoking cessation treatments: experience of the Pacific Business Group on Health. *American Journal of Health Promotion* 2001;15(5):350–6.
- 21 George Washington University Center for Health Services Research and Policy. Sample Purchasing Specifications Related To Tobacco-Use Prevention And Cessation: a Technical Assistance Document. October 2002. Available at: [www.gwhealthpolicy.org/news/tobacco/tobacco-prevent.html](http://www.gwhealthpolicy.org/news/tobacco/tobacco-prevent.html). Accessed 06/24/03.
- 22 Hopkins DP, Briss PA, Ricard CJ, et al. Task Force on Community Preventive Services. *American Journal of Preventive Medicine* 2001; 20(2 Suppl):16–66.
- 23 U.S. Bureau of the Census. *Current Population Survey: Annual Demographic Survey Supplement—Detailed Insurance (P60) Package*. Available at: <http://ferret.bls.census.gov/macro/032002/health/toc.htm>. Accessed 10/18/02.
- 24 Partnership for Prevention. *Insurance Coverage of Clinical Preventive Services in Employer-sponsored Health Plans: Preliminary Results of a Partnership for Prevention/William M. Mercer National Survey*, 2001. Washington, DC. Partnership for Prevention In press.
- 25 Curry SJ, Grothaus MA, McAfee T, Pabiniak C. Use and cost effectiveness of smoking-cessation services under four insurance plans in a health maintenance organization. *New England Journal of Medicine* 1998; 339(10):673–79.
- 26 Marks JS, Koplan JP, Hogue CJR, Dalmat ME. A cost-benefit/cost-effectiveness analysis of smoking cessation for pregnant women. *American Journal of Preventive Medicine* 1990;6(5):282–9.
- 27 Professional Assisted Cessation Therapy (PACT). Employers’ Smoking Cessation Guide: Practical Approaches to a Costly Workplace Problem. Available at: [www.endsmoking.org/resources/employersguide/pdf/employersguide.pdf](http://www.endsmoking.org/resources/employersguide/pdf/employersguide.pdf). Accessed 03/26/03.
- 28 Wagner EH, Curry SJ, Grothaus L, Saunders KW, McBride CM. The impact of smoking and quitting on health care use. *Archives of Internal Medicine* 1995;155(16):1789–95.
- 29 Centers for Disease Control and Prevention, American Cancer Society, and Wellness Councils of America. *Making Your Workplace Smokefree—A Decision Maker's Guide*. 1996. Available at: [www.cdc.gov/tobacco/research\\_data/environmental/etsguide.htm](http://www.cdc.gov/tobacco/research_data/environmental/etsguide.htm). Accessed 04/05/03.
- 30 Halpern MT, Shikiar R, Rentz AM, Khan ZM. Impact of smoking status on workplace absenteeism and productivity. *Tobacco Control* 2001;10:233–8.
- 31 Min, Shirley. “Tobacco Free Company a Big Hit,” WNCN-TV, NBC-17, 8-6-07.
- 32 Sebans, Shelby, “It’s cold turkey week: Area hospitals going tobacco-free,” *Wilmington Star-News*, 11-13-07.

North Carolina Department of Health and Human Services  
 Division of Public Health ● Chronic Disease and Injury Prevention  
[www.ncdhhs.gov](http://www.ncdhhs.gov) ● [www.ncpublichealth.com](http://www.ncpublichealth.com)



N.C. DHHS is an equal opportunity employer and provider. 1/09

